

# Wireless – WHY ALL THE CONCERN? – The Intelligent Guide

## 1. The nature of mobile wireless

- 1.1. **Mobiles, Masts (inc 5G), Wi-Fi, Bluetooth** etc. emit **pulses of polarised microwave radiation** from 600MHz to typically 60GHz or more (see 4. below for 5G specifics).
- 1.2. Signal is 100% pulse modulated: |||||\_|||||\_||\_|||||\_||\_|||||\_ where |||||=microwave carrier freq.
- 1.3. The pulse frequencies are **ELF** (Extremely Low Frequency) e.g. ~2, 4, 8, 10, 217 Hz. Typically there will be many more low frequencies present due to transmissions from multiple devices.
- 1.4. ALL radio-wave frequencies are absorbed to some degree – the longer wave lengths deeper than shorter wavelengths BUT because of **Brillouin Precursors**, can still go deep). Any absorption impacts blood, nerves and bio-physiological processes (see mechanisms under 2. below) including adaptive stress from cellular response to the signals.
- 1.5. The ELF pulses are **bio-active** (as acknowledged by the Stewart Report 2000 - Section 5).
- 1.6. **THE HEALTH ISSUE IS NOT JUST POWER, IT IS SIGNAL. BIOLOGY IS ACUTELY SENSITIVE AND BIO-STRUCTURES ARE ‘PRE-IONISED’.**
- 1.7. Side note: At ICNIRP max public power density guidelines, the heat absorbed by the body is 20% of the body’s own metabolic rate! Under new ICNIRP 2020 Guidelines this increases to 80%!

## 2. Mainstream science on health implications of existing wireless systems

- 2.1. The majority of scientific reports taken as a whole demonstrate biological effects below guideline levels (**Pubmed various**, <https://www.orsaa.org/research-papers.html>, [www.Bioinitiative.org](http://www.Bioinitiative.org), **IET 2014 review of science**, [Kostov](#), as well as <https://www.emfcall.org/> and <https://www.emf-portal.org/en>).
- 2.2. There are numerous symptoms - headaches, memory problems, sleep disorders, tinnitus and severe fatigue etc. and EMFs linked to long-term conditions inc Cancer, Alz, Immunosuppression, Neurological and Digestive diseases etc. Note that in England last year 56% of population had 1 or more long term conditions (GP Survey 2019).
- 2.3. **US NTP** (largest study in history and awaited by PHE with baited breath until it showed issues) and **Ramazzini** studies have linked wireless with cancer.
- 2.4. Mechanisms: A significant mechanism is **Voltage-gated Calcium Channel (VGCC)** resulting in calcium efflux leading to oxidative stress, DNA and neurological effects. The sensitivity of cells is much higher than government claims. There are other mechanisms.
- 2.5. A ‘catenation effect’ applies in biological processes where very short term effects lead to longer term effects leading to even longer term effects to death. In addition, radiation also interferes with natural bio-photon communication. Thus the smallest bio-effects over time can have dramatic consequences in biology!

## 3. Official positions on wireless frequency EMFs in general

- 3.1. UK use **ICNIRP 1998** guideline levels. Levels address only the 6 minute heating effects for wireless and **EXCLUDE** the possibility of health impacting biological effects below those crude levels. ALSO ICNIRP does NOT address safety limits for wildlife or pets! Note that, from Section 1, issue is the waveform.
- 3.2. ICNIRP updated guidelines 2020 but basis not changed. [93 consultation responses](#), a large number of which were critical of the basis of the guidelines and not answered or addressed in new guidelines. ICNIRP failed to give proper responses to the responses. Guidelines use WHO definition of health but in APP B analysis of possible biological effects use lack of study of bio-effect is justification to continue (see for example APP B on Neurodegenerative Diseases). This is totally unscientific, as is the basis described under PURPOSE AND SCOPE.
- 3.3. The **FCC** has to date not completed work on assessing biological effects, it started in 2013!
- 3.4. **PHE** uses **AGNIR 2012** which is inaccurate –evidence reveals biological effects including reduced male fertility, oxidative stress, proteins and cell membranes etc (See [paper by S.Starkey](#)).
- 3.5. **PHE** and **COMARE** do not appear proactive instead waiting for the next, yet to be completed – study
- 3.6. **COMARE** appears to spend only a few hours a year on the subject.
- 3.7. **WHO** (IARC) Classes as **Class 2B** Carcinogen – see [IARC Monograph 102](#).
- 3.8. The **CMO** (2005) recommends children minimise mobile use yet don’t enforce that and at the same time the environment rings with the stuff notably Wi-Fi in schools!
- 3.9. **COE** recognised EHS in 2011 ([Resolution 1815](#)).
- 3.10. Recent ICNIRP Conflict of Interest is demonstrated in [this report by MEPs](#)

#### 4. What is 5G?

- 4.1. Frequency: 5G comes in 3 main flavours: **700MHz** & Sub-6 (circa **3.6GHz**) on existing masts and **26GHz** mmWave on new small cells every ~200yds / lamppost lights etc (=Densification)
- 4.2. Beam-forming: 5G uses narrow pencil beams to transmit to end users, thereby sending power over further distances and increasing exposure levels at User End. Recognised that general EMF levels will RISE as 5G is ADDITIVE.
- 4.3. Exclusion Zones: 5G will result in larger exclusion zones which zones the public has no knowledge of and upper floor residents likely to be sterilised.
- 4.4. Absorption: For mmWave absorption in skin. BUT, skin is an organ and contains nerves, sweat glands etc – Brillouin Precursors – **re-radiation** deeper. Also Bees absorb significantly greater power from smaller wavelength transmissions than even 4G.

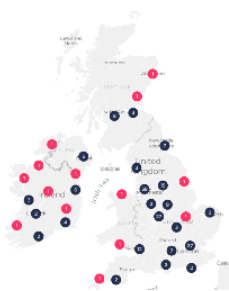
#### 5. Mainstream science on 5G

- 5.1. Scientific opinion is that there will be adverse effects stemming from skin and eyes noting it is still pulsed / polarised. See Kostov summary as link above.
- 5.2. There is also a big issue to do with skin heating effect (SAR increases due to less volume in heated skin). There is still an industry debate on whether to use SAR or Power Density for mmWave at the same time as this tech is being deployed!

#### 6. Official positions specifically on 5G

- 6.1. **ICNIRP** regard 5G as a public experiment (ICNIRP Chair Dr Rongen Daily Telegraph 3/3/19).
- 6.2. **FCC** Wont study, regulate or wait for standards (Tom Wheeler 20/6/16).
- 6.3. (**Important!**) **ITU** 'Applying beam-forming would easily exceed current EMF exposure limits' (ITU Series K Supplement 14) - HENCE WHY ICNIRP WANT TO INCREASE PD LEVELS 4-FOLD TO 40W/m2 [see ICNIRP 2020 Guidelines 100kHz – 300GHz released after the meeting]!

#### 7. 5G UK City roll-out & trials 2019-2020



- 7.1. Since 5G EXPERIMENTS are ongoing in UK 120+ cities (>12% of UK Towns and Cities – many in London, SE, Midlands, NE, NW) in a violation of informed consent contrary to Nuremburg code of 1947, WHO is gathering the results and will these be public? Note: It is assumed PHE will be too incompetent to do this.
- 7.2. There are anecdotal effects such as birds dropping from sky in Anglesey, The Hague and Coventry.
- 7.3. Has a link between COVID-19 and 5G been investigated by UK Health authorities since 5G **IS A PUBLIC EXPERIMENT** - YES OR NO noting that RFR is known to weaken immune system via adaptive stress responses?

#### 8. Risk

	Minor	Moderate	Severe	Critical
High 75%	7	21	35	49
Medium 50%	5	15	25	35
Unlikely 25%	3	9	15	21
Very unlikely 10%	1	3	5	7

- 8.1. Insurance: Lloyds of London EXCLUDE coverage in any policy for EMF harms!
- 8.2. Have the authorities fully risk-assessed wireless: - **HIGH/MEDIUM PROBABILITY + HIGH IMPACT = HIGH RISK LEVEL**
- 8.3. All have a responsibility to weigh up risk.

#### 9. Alternatives to the present direction need to be pursued

- 9.1. Genuine Consultation with the people – what do they want / need / what is truly best for society – is industrial growth and greed and power the only way forward?
- 9.2. Wired, Li-Fi (Orkney Isles – Graemsay), FFTH (Full-Fibre-To-Home)
- 9.3. Public Health Mitigation (for the ill-health – e.g. nutrition & preventative)
- 9.4. Much lower levels (e.g. see Bioinitiative.org) and / or use of non-bioactive waveforms.

#### 10. Conclusions

- 10.1. Industry, Government and Authorities are pushing 5G and not listening to scientists and public. This has to stop before there is total catastrophe.
- 10.2. Wireless is an **environmental pollutant** - magic for machines, bad for biology – need to put signs up for wildlife to avoid beams and exclusion zones!
- 10.3. The **official position is wrong** and **5G will make things vastly worse**.
- 10.4. **ICNIRP provide guidelines only**. Some countries don't use. ICNIRP Chairman stated 'why do people use us?'
- 10.5. A complete review of **direction and environmental impact assessment is required NOW** as well as **consultation on alternatives and real need**.